



Multi-Platform Application Development Strategies for Disconnected Mobile Applications

Gunnison Consulting Group, Inc

March 29, 2012

Gunnison at Census

Providing full lifecycle software engineering at Census since 1994.

DSSD

DSCMO

ACSO

TMO

EPCD

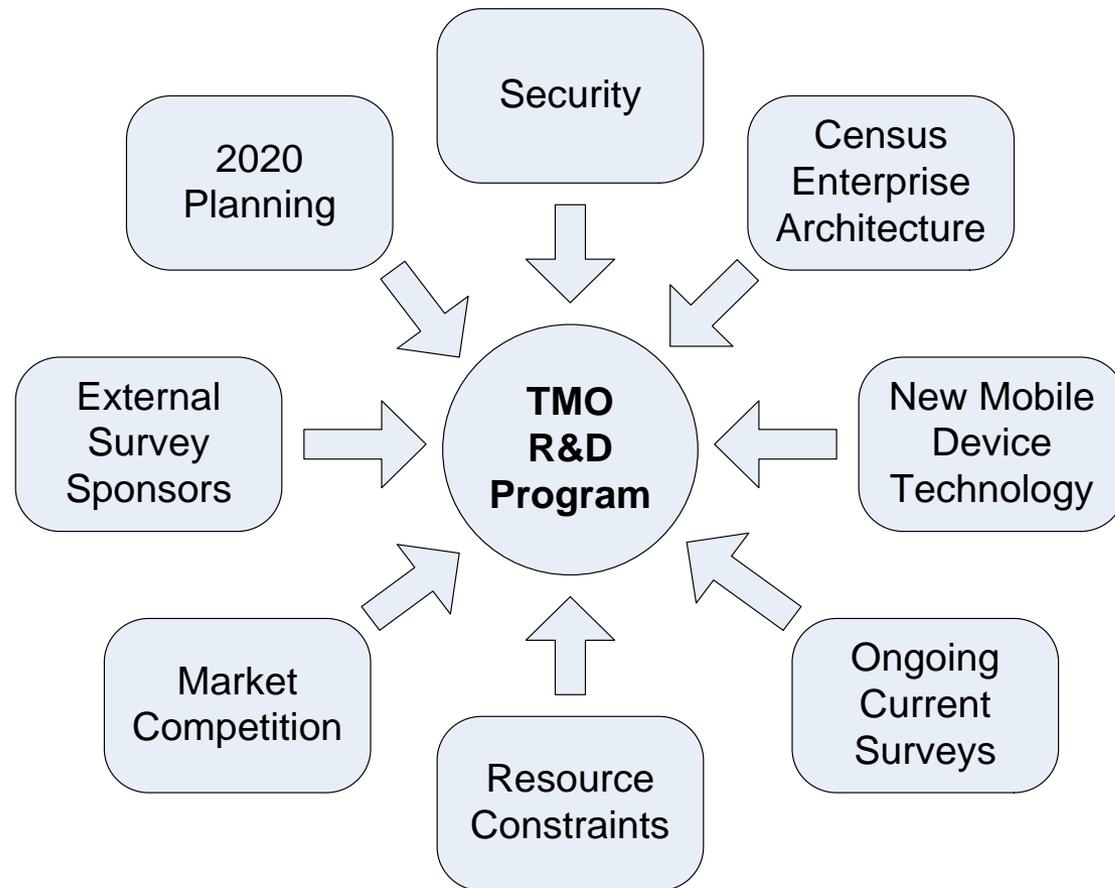
CARRA

MapText

ADI

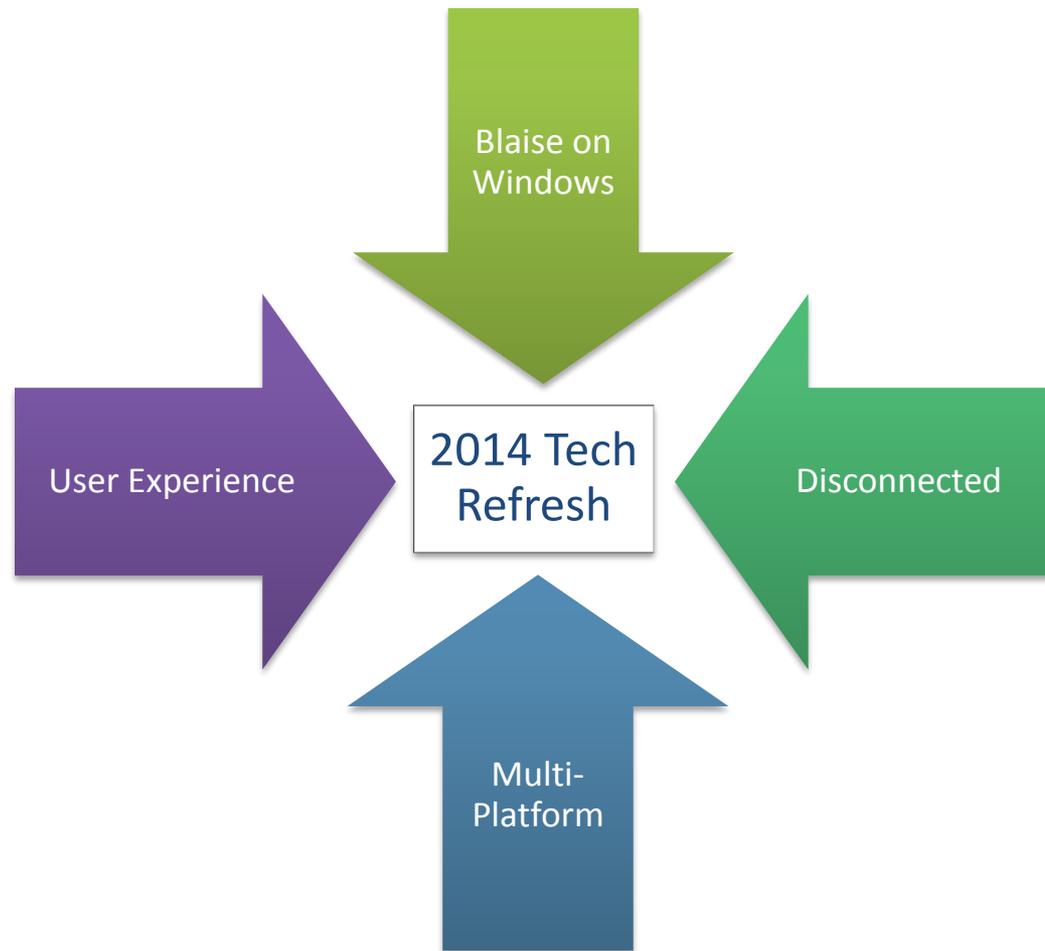
Agilex

TMO in Context

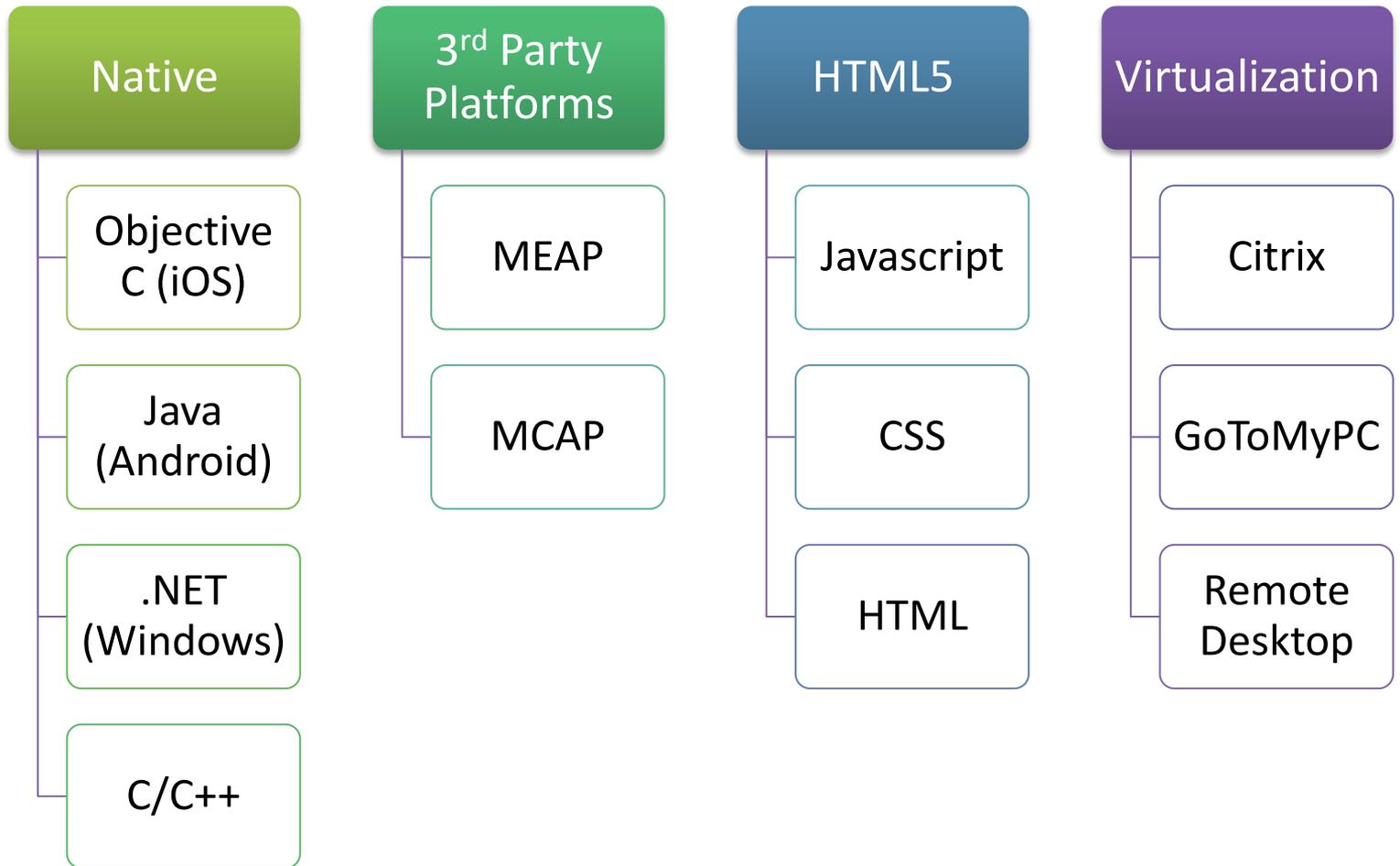


Forces Influencing TMO R&D Activities

The Near Term Goal



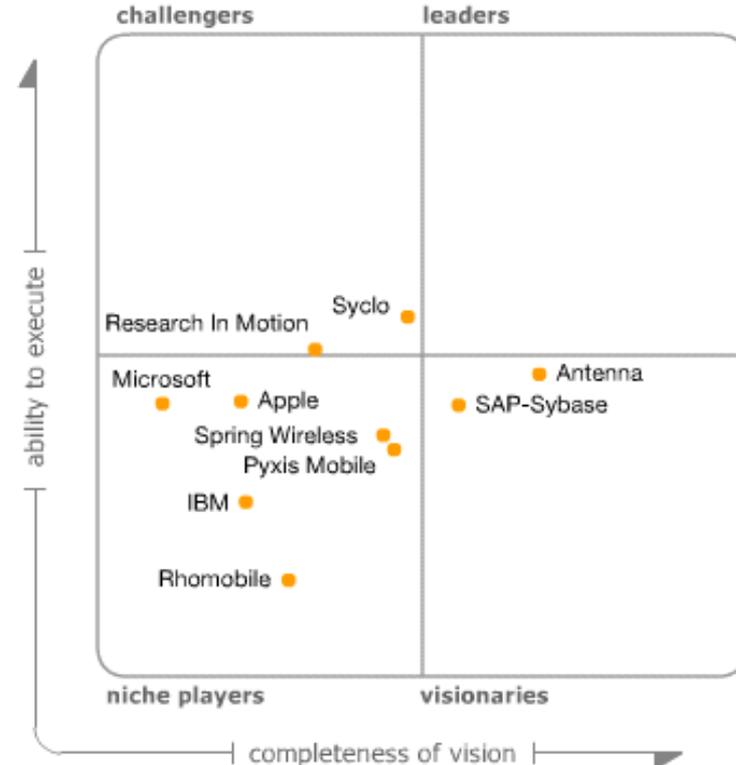
Technical Approach Options



Mobile Enterprise Application Platforms (MEAP)

Magic Quadrant

Figure 1. Magic Quadrant for Mobile Enterprise Application Platforms



As of April 2011

Why this is hard...

- The technical challenges:
 - Battery Life
 - Memory Management (esp. on iOS)
 - .NET on ARM (Windows 8)
 - Thread Management (esp. in Android)
 - Consumer focus
 - Strong differences in platform-specific languages
 - Laptop vs. Tablet
- Gartner recommendations:
 - “Over analysis is a risk in an immature market.”
 - Rule of Three: “If an organization is targeting three or more device platforms, if they have three or more applications, or if they have three or more back-end systems, then the multichannel or cross-platform tools typically yield better project results during the course of three to five years than native tools.”
 - “Enterprises need to consider whether they can mitigate platform uncertainty by adopting a single platform strategy for 2011 to 2012.”

(Choosing Cross-Platform Tools for Native Mobile Applications, G00211990)

(Magic Quadrant for Mobile Enterprise Application Platforms, G00211688)

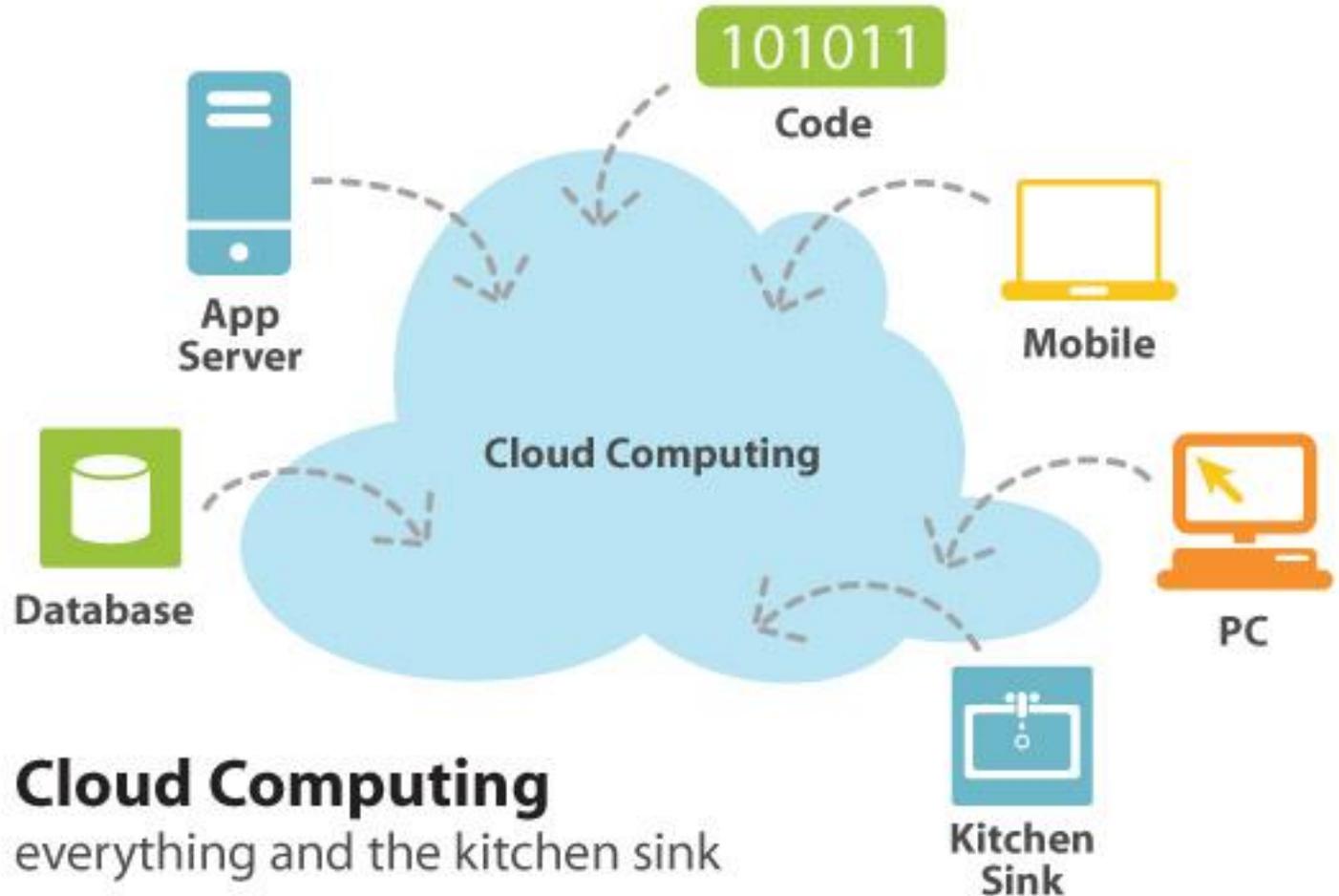
(Critical Capabilities for Mobile Enterprise Application Platforms, G00212257)

The Promise of HTML5



Chromebook
Nothing but the web

HTML5 and the Cloud

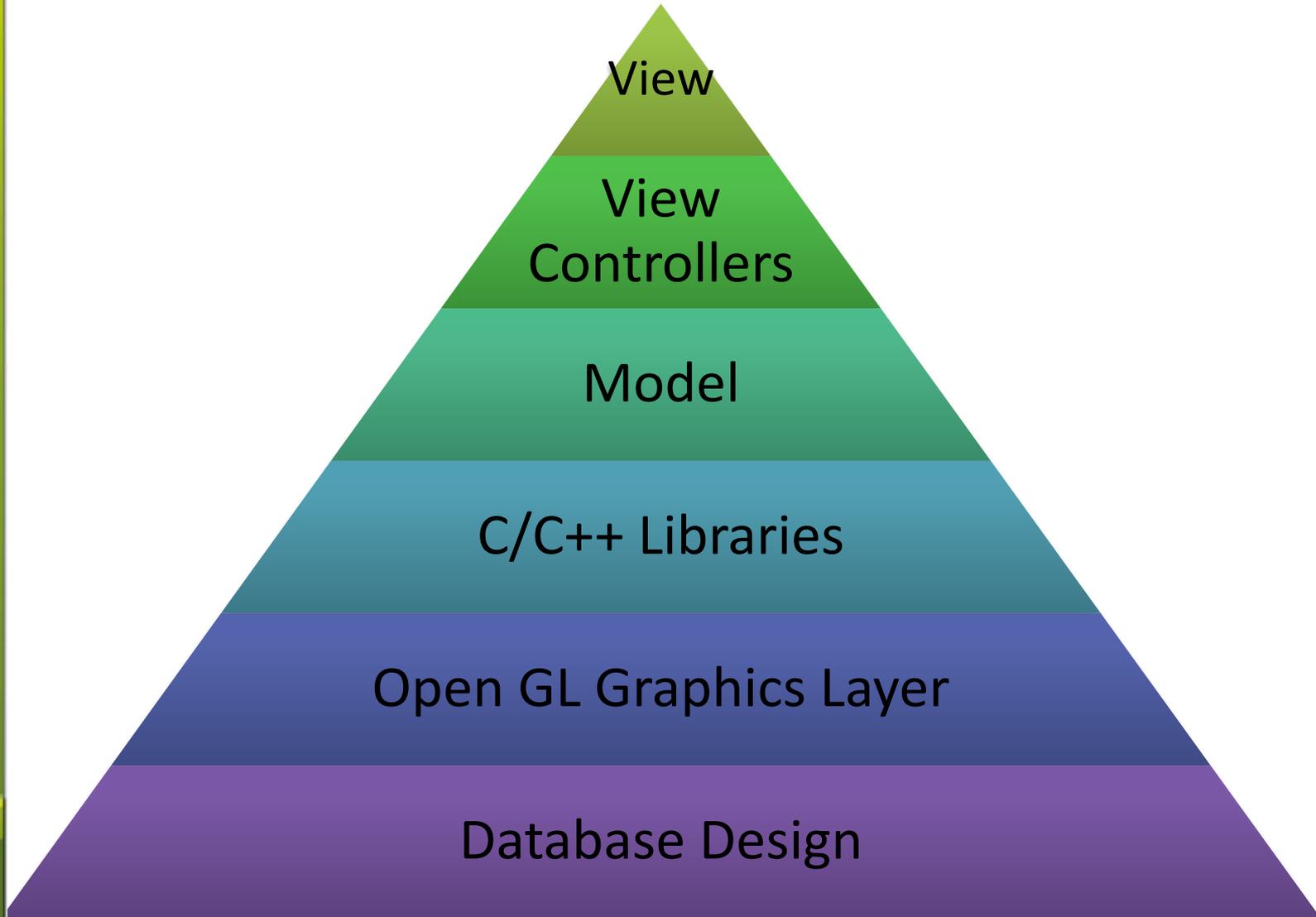


What about connectivity?

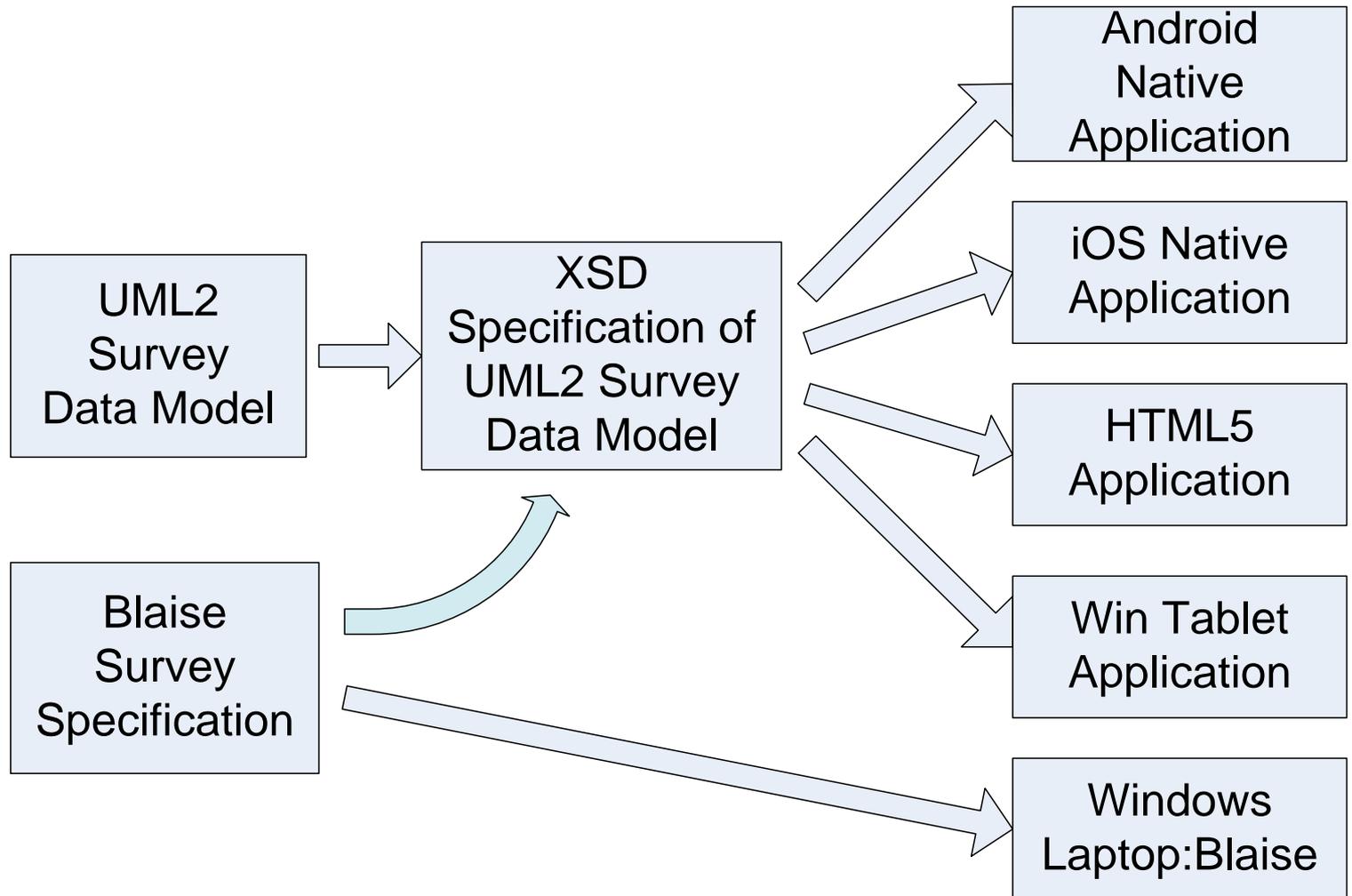
- Web Storage
- Application Cache
- Web SQL
- Indexed DB



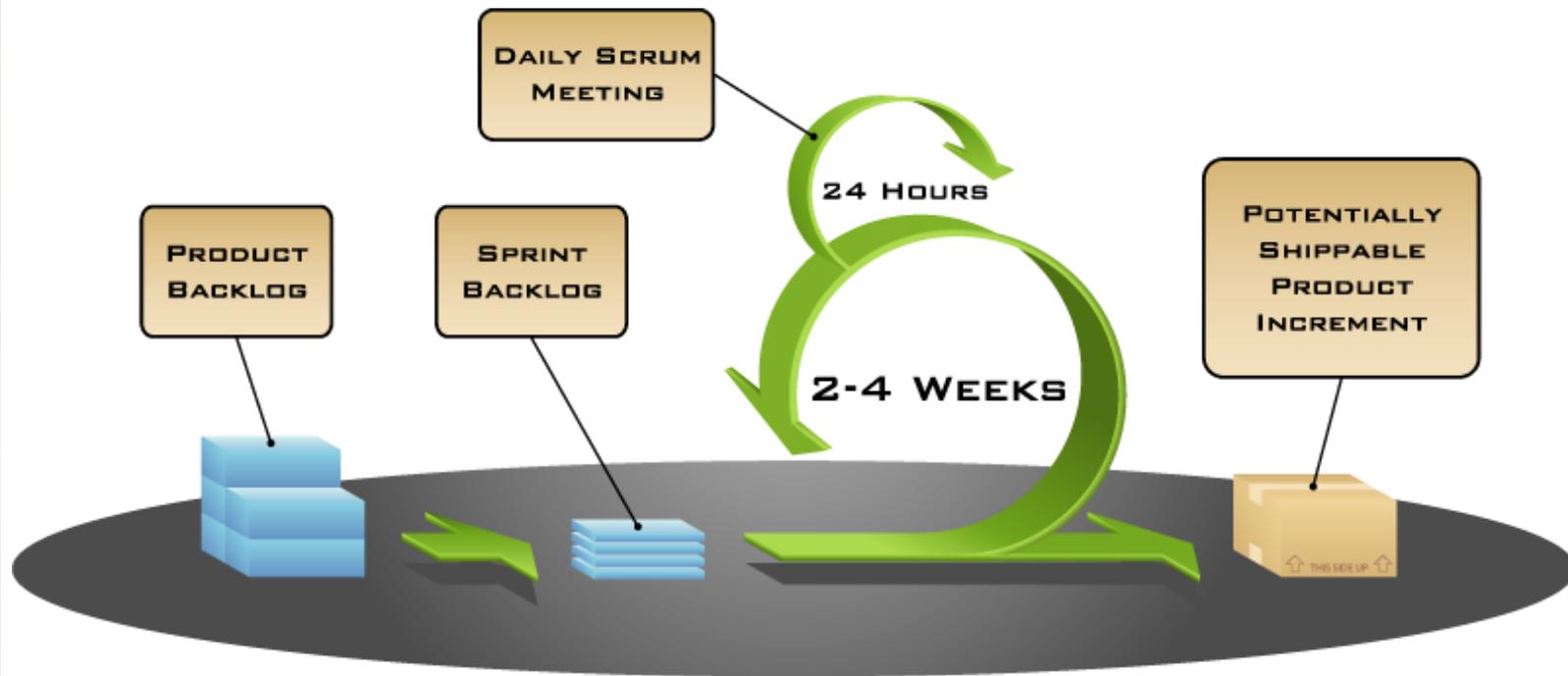
Native Code: How much design can be shared across platforms?



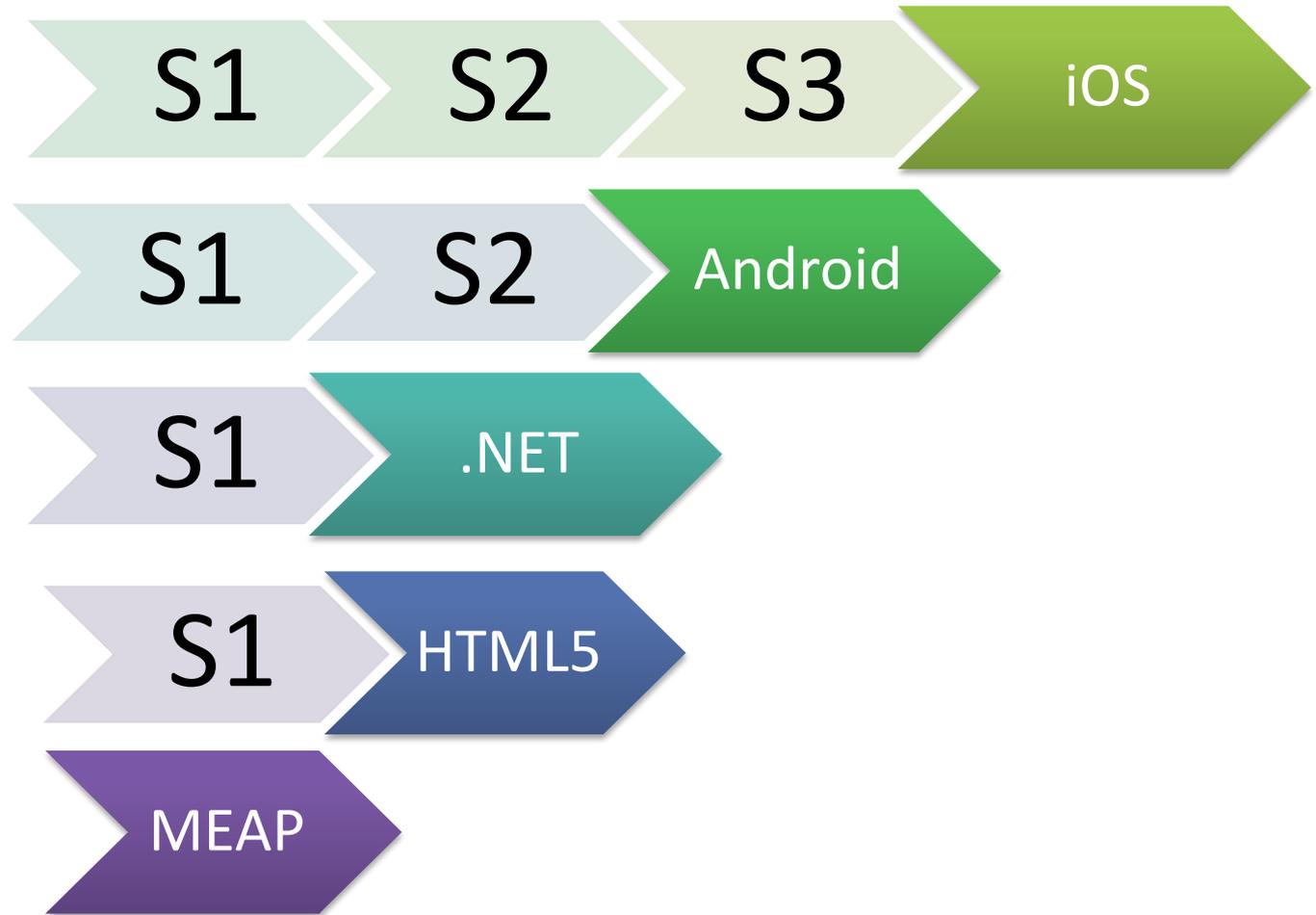
UML + XML/XSD + O-O



The Role of Agile SCRUM



“Build 5 Ways” Rapid Prototyping



United StatesTM
Census
Bureau

Gunnison
Consulting Group, Inc.

A graphic logo consisting of a central black gear-like shape surrounded by a circular arrangement of black dots of varying sizes, creating a starburst or network effect.